PTO/SB/08a (08-03)

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bstitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 11

Complete If Known						
Application Number	10/775481					
Filing Date	February 10, 2004					
First Named Inventor	Scott Waldman					
Art Unit	1642					
Examiner Name	Catherine Joyce					
Attorney Docket Number	TJU0016-100 (WAL_SCO.008/CGG)					

			U.S. PATENT D	OCUMENTS	
Examiner	Cite	Document Number	Publication/Issue Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant
tnitials *	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear
/PR/	AA	US-5,518,888	05-21-1996	Scott A Waldmann et al.	
/PR/	AB	US-5,879,656	03-09-1999	Scott A Waldmann et al.	
/PR/	AC	US-6,060,037	05-09-2000	Scott A Waldmann et al.	
/PR/	AD	US-6,268,159	07-31-2001	Scott A Waldmann et al.	
JPR/	AE	US-5,601,990	02-11-1997	Scott A Waldmann et al.	
/PR/	AF	US-5,731,159	03-24-1998	Scott A Waldmann et al.	
/PR/	AG	US-5,928,873	07-27-1999	Scott A Waldmann et al.	
/PR/	AH	US-5,962,220	10-05-1999	Scott A Waldmann et al.	
/PR/	ΑI	US-6,087,109	07-11-2000	Scott A Waldmann et al.	•
i iPRI	ΑĬ	US-6,767,704	07-27-2004	Scott A Waldmann et al.	
7PR/	AK	US-5,530,101	06-25-1996	Cary L. Queen et al.	
HPŘ/	AL	US-5,585,089	01-17-1996	Cary L. Queen et al.	
7PR/	AM	US-5,225,539	07-06-1993	Gregory P. Winter et al.	
7PR/	AN	US-5,270,170	12-14-1993	Schatz et al.	
/PR/	AO	US-5,338,665	08-16-0994	Schatz et al.	
/PR/	AP	US-5,395,750	03-07-1995	Dillon et al.	
7PR/	AQ	US-5,223,409	6-29-1993	Ladner et al	

		FOREIGN PA	TENT DOCUM	MENTS		
	I	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant	
Examiner Initials*	Cite No.1	Country Code ³ - Number ⁴ - Kind Code ⁶ (# known)	Date/Filing Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	τ°
/PR/	AR	WO9742220	11-13-1997	Thomas Jefferson University		
/PR/	AS	WO9511694	05-04-1995	Thomas Jefferson University		
/PR/	AT	WO9742506	11-13-1997	Thomas Jefferson University		
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Examiner Signature	/Peter Reddia/	Date Considered	10/06/2007	

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Substitute for form 1449A/PTO					Complete if Known	
				Application Number	10/775481	
INFC	RMATION	DIS	CLOSURE	Filing Date	February 10, 2004	
STATEMENT BY APPLICANT		First Named Inventor	Scott Waldman			
				Art Unit	1642	
(Use as many sheets as necessary)			necessary)	Examiner Name	Catherine Joyce	
Sheet	2	of	11	Attorney Docket Number	TJU0016-100 (WAL_SCO.008/CGG)	

			U.S. PATENT D	OCUMENTS	
Examiner	Cite	Document Number	Publication/Issue Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant
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7PR/	ΑŲ	US-5,366,862	11-22-1994	Venton et al.	·
/PR/ /PR/	AV	US-5,340,474	08-23-1994	Kauvar et al	
/PR/	AW	US-5,133,866	07-28-1992	Lawrence M. Kauvar et al.	
/PR/	AX	US-4,963,263	10-16-1990	Lawrence M. Kauvar et al.	
/PR/	AY	US-5,217,869	06-08-1993	Lawrence M. Kauvar et al.	
7PR/	AZ	US-5,405,783	04-11-1995	Pirrung et al.	
/PR/	BA	US-5,143,854	09-01-1992	Pirrung et al.	
/PR/	BB	US-5,384,261	01-24-1995	Winkler et al.	
/PR/	BC	US-5,221,736	06-22-1993	Coolidge et al.	
"/PR/	BD	US-5,412,087	05-02-1995	McGall et al.	
/PRI	BE	US-5,324,483	06-28-1994	Cody et al.	
/PR/	BF	US-5,252,743	10-12-1993	Barret et al.	
/PR/	BG	US-5,424,186	06-13-1995	Foder et al.	
/PR/	BH	US-5,420,328	05-30-1995	Campbell et al.	
/PR/	BI	US-5,288,514	02-22-1994	Ellman et al.	
/PR/	BJ	US-4,601,896	07-22-1986	Mark Nugent et al.	
7PR/	BK	US-4,729,893	03-08-1988	Robert L. Letcher et al.	

	FOREIGN PATENT DOCUMENTS						
Punning	.	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant		
Examiner Initials*	Cite No.1	Country Code ³ - Number ⁴ - Kind Code ⁶ (<i>if known</i>)	Publication Applicant of (Applicant of Cited Document	Applicant of Cited	Passages or Relevant	. т
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Examiner Signature	/Peter Reddig/	Date Considered	10/06/2007	

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Attorney Docket Number

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	Application Number	10/775481			
INFORMATION DISCLOSURE	Filing Date	February 10, 2004			
STATEMENT BY APPLICANT	First Named Inventor	Scott Waldman			
	Art Unit	1642			
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Sheet

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PR/ BM US-5,271,961 12-21-1993 Edith Mathiowitz et al. PR/ BN US-5,350,741 09-27-1994 Kanji Takada et al.	Passages or Relevant Figures Appear
7PR/ BN US-5,350,741 09-27-1994 Kanji Takada et al.	
/PR/ BO US-5,399,347 03-21-1995 David E. Trentham et al	
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FOREIGN PATENT DOCUMENTS						
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Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Date/Filing Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶
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	NEO	D	0N F	.	OL OCUPE	Application Number	10/775481		
					CLOSURE	Filing Date	February 10, 2004		
	STAT	LEMEN.	T BY	Α	PPLICANT	First Named Inventor	Scott Waldman		
						Art Unit	1642		
		(Use as ma	ny sheel	ts as	necessary)	Examiner Name .	Catherine Joyce		
7	Sheet	4		of	11	Attorney Docket Number	TJU0016-100 (WAL_SCO.008/CGG)	J	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
/PR/	Ames, J. B. et al., "Three-dimensional structure of guanylyl cyclase activating protein-2, a calcium-sensitive modulator of photoreceptor guanylyl cyclases," J. Biol. Chem., (1999), 274, 19329-19337.		
/PR/ BQ Andric et al. "Dependence of soluble guanylyl cyclase activity on calcium signaling in pituitary cells," J. Biol. Chem. (2001), 276, 844-849			
/PR/	BR	Berridge, M. J. et al., "Calcium-a life and death signal," Nature (1998), 395, 645-648.	
/PR/	BS	Bhattacharya, J. et al., "Rise of intracellular free calcium levels with activation of inositol triphosphate in a human colonic carcinoma cell line (COLO 205) by heat-stable enterotoxin of Escherichia coli," Biochim. Biophys. Acta (1998), 1403, 14	
/PR/	ВТ	Biel et al., "Cyclic nucleotide-gated channels-mediators of NO:cGMP-regulated processes," Naunyn Schmiedeberg's Arch. Pharmacol. (1998), 358, 140-144	
/PR/	BU	Birkenkamp-Demtroder, K. et al., "Gene expression in colorectal cancer," Cancer Res. (2002), 62, 4352-4363	
/PR/	BV	Blanchard R.K. et al., "Upregulation of rat intestinal uroguanylin mRNA by dietary zinc restriction," Am. J. Physiol. (1997) 272 (5Pt 1) G972-978	
	BW	Bodanszky et al, Peptide Synthesis, (1976) John Wiley & Sons, 2d Ed	
/PR/	вх	Brenner et al., "Encoded combinatorial chemistry," Proc. Natl. Acad. Sci . USA (June 1992), 89:5381-5383.	
/PR/ BY Briskey, E. N. et al., "Colorectal cancer: update on recent advances and their impact on screening protocols," J. Natl. Med. Assoc. (2000), 92(5), 222-230.		Briskey, E. N. et al., "Colorectal cancer: update on recent advances and their impact on screening protocols," J. Natl. Med. Assoc. (2000), 92(5), 222-230.	
/PR/	BZ	Buset, M. et al., "Inhibition of human colonic epithelial cell proliferation in vivo and in vitro by calcium," Cancer Res. (1986), 46, 5426-5430	

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Sheet

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of 11

Complete if Known					
Application Number	10/775481				
Filing Date	February 10, 2004				
First Named Inventor	Scott Waldman				
Art Unit	1642				
Examiner Name	Catherine Joyce				
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		NON PATENT LITERATURE DOCUMENTS	,	
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/PR/	CA	Butt, E., "(Rp)-8-pCPT-cGMPS, a novel cGMP-dependent protein kinase inhibitor," Eur. J. Pharmacol. (1994), 269(2), 265-268.		
/PR/	СВ	Carrithers et al., "Guanylyl cyclase C is a selective marker for metastatic colorectal tumors in human extraintestinal tissues," Proc Natl Acad Sci USA (1996) 93(25):14827-32.		
	СС	Centers for Disease Control and Prevention. (2001) in Health Information for International Travel 1999—2000 (Department of Health and Human Services, Atlanta).		
/PR/ CD Chan et al., "Amino acid sequence of heat-stable enterotoxin produced by Escherichia coli pathogenic for man," J. Biol. Chem. (1981), 256(15):7744-6.				
/PR/ CE Chao, A. C. et al., "Activation of intestinal CFTR CI- channel by heat-stable enterotoxin and guanylin via cAMP-dependent protein kinase," EMBO J. (1994) 1;13(5):1065-72.				
/PR/	CF	Cohen et al., "Guanylin mRNA expression in human intestine and colorectal adenocarcinoma," Lab. Invest. (1998), 78(1), 101-108.		
/PR/	CG	Cull M.G. et al., "Screening for receptor ligands using large libraries of peptides linked to the C terminus of the lac repressor," Proc. Natl. Acad. Sci. USA (March 1992), 89:1865-1869.		
/PR/	СН	Currie, M.G. et al., "Guanylin: an endogenous activator of intestinal guanylate cyclase," Proc. natl. Acad. Sci. USA (1992) 89:947-951.		
/PR/	CI	Devor, D. C. et al., "Modulation of K+ channels by arachidonic acid in T84 cells. I. Inhibition of the Ca(2+)-dependent K+ channel," Am. J. Physiol. (1998), 274, C138-C148.		
/PR/	CJ	Dostmann, W. R. et al., "(RP)-cAMPS inhibits the cAMP-dependent protein kinase by blocking the cAMP-induced conformational transition," FEBS Lett. (1995), 375(3), 231-234.		
Dayhoff, M.O. et al., "A model of evolutionary change in proteins" in Atlas of Protein Sequence and Structure, Nat. Biomed. Res. Foundation, Washington D.C. (1978), Vol. 5, supp. 3, chapter 22, 34, 352.				

Examiner	(D) D)	Date	
Signature	/Peter Reddig/	Considered	10/06/2007

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		NON PATENT LITERATURE DOCUMENTS	
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/PR/	CL	Dzeja, C. et al., "Ca2+ permeation in cyclic nucleotide-gated channels," EMBO J. 1999 Jan 4;18(1):131-44. 18, 131144.	
/PR/	СМ	Fodor, S. P. A. et al., "Light-directed, spatially addressable parallel chemical synthesis," Science Vol 251, Issue 4995, 767-773 (Feb. 15, 1991).	
	CN	Ferlay, J., (2001) in GLUBOCAN 2000. Cancer Incidence, Mortality and Prevalence Worldwide, Version 1.0 (International Agency for Research on Cancer, Lyon).	
/PR/	со	Fischer, T. A et al. "Activation of cGMP-dependent protein kinase Ibeta inhibits interleukin 2 release and proliferation of T cell receptor-stimulated human peripheral T cells," 20 U., Sopper, S., & Lohmann, S. M. (2001). J. Biol. Chem. 276, 5967-5974	
/PR/	СР	Forte L. R., "Guanylin regulatory peptides: structures, biological activities mediated by cyclic GMP and pathobiology," Regul. Pept. (1999) May 31;81(1-3):25-39.	
/PR/	CQ	Fukumoto, S. et al., "Distinct role of cAMP and cGMP in the cell cycle control of vascular smooth muscle cells: cGMP delays cell cycle transition through suppression of cyclin D1 and cyclin-dependent kinase 4 activation," Circ. Res. (1999) 85(11), 985-991.	
/PR/	CR	Gadbois, D. M. et al. "Multiple kinase arrest points in the G1 phase of nontransformed mammalian cells are absent in transformed cells," <i>Proc. Natl. Acad. Sci. USA</i> (1992), 89(18), 8626-8630	
	cs -	Genarro, Alfonso, ed. Remington's Pharmaseutical Sciences, 18th Edition, 1990, Mack Publishing Co., Easton PA.	
/PR/	СТ	Giannella, R. A. et al., "Escherichia coli heat-stable enterotoxins, guanylins, and their receptors: what are they and what do they do?" J. Lab. Clin. Med. (1995), 125(2), 173-181.	
/PR/	CU	Guarino, A. et al., "Small and large intestinal guanylate cyclase activity in children: effect of age and stimulation by Escherichia coli heat-stable enterotoxin," <i>Pediatr. Res.</i> (1987), 21(6), 551-555	
/PR/	CV	Grider J., "Interplay of VIP and nitric oxide in regulation of the descending relaxation phase of peristalsis," Am. J. Physiol. (1993) Feb;264(2 Pt 1):G334-40	
/PR/	cw	Hamra, F. K. et al., "Uroguanylin: structure and activity of a second endogenous peptide that stimulates intestinal guanylate cyclase" <i>Proc. Natl. Acad. Sci. USA</i> (1993), 90(22), 10464-10468.	

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	СХ	Harlow E. and D. Lune, ANTIBODIES. A Laboratory Manual, Cold Spring Harbor Laboratory, Cold spring Harbor NY (1988).	
/PR/	CY	Harrison, S. A et al., "Isolation and characterization of bovine cardiac muscle cGMP-inhibited phosphodiesterase: a receptor for new cardiotonic drugs," Mol. Pharmaco. (1986 May);29(5):506-14.	
/PR/	cz	Hill. O et al., "A new human guanylate cyclase-activating peptide (GCAP-II, uroguanylin): precursor cDNA and colonic expression," Biocim BioPhys. Acta (1995) 1253 (2), 146-149.	
/PR/	DA	Hill, D. R et al., "Health advice for international travel," Ann. Intern. Med. (1988), 108(6), 839-852.	
	DB	Hille, B., Jonic Channels of Excitable Mombranes, (1984) 14 edition (Sinauer Associates, Sunderland, MA) ISBN 0-87893-322-0.	
/PR/	DC	Hood, J. et al., "Protein kinase G mediates vascular endothelial growth factor-induced Raf-1 activation and proliferation in human endothelial cells," J. Biol. Chem. (1998), 273(36), 23504-23508.	
/PR/	DD	Hughes, J. M. et al., "Role of cyclic GMP in the action of heat-stable enterotoxin of Escherichia coli," Nature (1978), 271, 755-756.	
/PR/	DE	Kent and Clark-Lewis, Synthetic Peptides in Biology and Medicine, p.295-358 (Alitalo, K et al. Elsevier Science Publishers, Amsterdam, 1985).	
/PR/	DF	Knoop, F. C. et al., "Pharmacologic action of Escherichia coli heat-stable (STa) enterotoxin," J. Pharmacol. Toxicol. Methods (1992) 28(2), 67-72.	
PR/	DG	Larrick and Fry, "Recombinant antibodies," Hum. Antibod. and hybridomas (1991), 2(4):172-89.	
/PR/	DH	Lucas, K. A. et al., "Guanylyl cyclases and signaling by cyclic GMP," Pharmacol. Rev. (2000), 52(3), 375-414.	

Examiner Signature	/Peter Reddig/	Date Considered	10/06/2007	

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	DI	McOrnie J.P.W., Protective Groups in Organic Chemistry, Flenum Fress, New York, NY (1973)	
/PR/	DJ	Merrifield, "Solid Phase Peptide Synthesis. I. The Synthesis of a Tetrapeptide," J. Am. Chem. Soc. (1963) 15:2149-2154.	
/PR/	DK	Miyazato, M. et al., "Uroguanylin gene expression in the alimentary tract and extra-gastrointestinal tissues," FEBS Lett. (1996), 398 (2-3), 170-174.	
/PR/	DL	Miyazato, M. et al., "Cloning and characterization of a cDNA encoding a precursor for human uroguanylin," Biochem. Biophys Res. Commun. (1996), 219 (2), 644-648.	
/PR/	DM	Miyazato, M. et al., "Genomic structure and chromosomal localization of human uroguanylin.," Genomics (1997)43 (3), 359-365.	
/PR/	DN	Moseley et al., "Isolation and nucleotide sequence determination of a gene encoding a heat-stable enterotoxin of Escherichia coli," Infect Immun. (1983) 39(3):1167-74.	
/PR/	DO	Notterman, D. A. et al., "Transcriptional gene expression profiles of colorectal adenoma, adenocarcinoma, and normal tissue examined by oligonucleotide arrays," Cancer Res. (2001), 61(7), 3124-3130.	
/PR/	DP	Neurath, H et al., The Proteins, VOL II, 3d Ed., p.105-137,,, Academic Press, New York, NY (1976)	
/PR/ .	DQ	Okamoto, K. et al., "Substitutions of cysteine residues of Escherichia coli heat-stable enterotoxin by oligonucleotide-directed mutagenesis," <i>Infec. Immun.</i> (1985), 55:2121-2125.	
/PR/	DR	Parkinson, S. J. et al., "Interruption of Escherichia coli heat-stable enterotoxin-induced guanylyl cyclase signaling and associated chloride current in human intestinal cells by 2-chloroadenosine," J. Biol. Chem. (1997), 272(2), 754-758.	
/PR/	DS	Penman, I. D. et al., "Dietary calcium supplementation increases apoptosis in the distal murine colonic epithelium," J. Clin. Pathol. (2000), 53(4), 302-307.	

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/PR/	DT	Pitari, G. M. et al., "Guanylyl cyclase C agonists regulate progression through the cell cycle of human colon carcinoma cells.," Proc. Natl. Acad. Sci. USA (2001), 98(14), 7846-7851.	
/PR/	טם	Qiu, W. et al., "Cyclic nucleotide-gated cation channels mediate sodium and calcium influx in rat colon," Am. J. Physiol. (2000) 278(2), C336-C343.	
/PR/	DV	Rosado, J. A., "Cyclic nucleotides modulate store-mediated calcium entry through the activation of protein-tyrosine phosphatases and altered actin polymerization in human platelets," J. Biol. Chem. (2001) 276(19), 15666-15675.	
	DW	Sambrook et al., Molecular Cloning: a Laboratory Munual, Second Ed., Cold Spring Harbor Press (1989)	
/PR/	DX	Sauvage F.J. et al., "Primary structure and functional expression of the human receptor for Escherichia coli heat-stable enterotoxin," Journal of Biol. Chemistry (1991) 266(27):17912-8.	
/PR/	DY	Sesink, A. L. et al., "Red meat and colon cancer: dietary haem-induced colonic cytotoxicity and epithelial hyperproliferation are inhibited by calcium," Carcinogenesis (2001) 22(10), 1653-1659.	
/PR/	DZ	Schulz, S. et al., "Guanylyl cyclase is a heat-stable enterotoxin receptor," Cell (1990), 63(5), 941-948.	
/PR/	EA	Shailubhai, K. et al., "Uroguanylin treatment suppresses polyp formation in the Apc(Min/+) mouse and induces apoptosis in human colon adenocarcinoma cells via cyclic GMP," Cancer Res. (2000) 60(18), 5151-5157.	
/PR/	ЕВ	Shimonishi, Y. et al., "Mode of disulfide bond formation of a heat-stable enterotoxin (STh) produced by a human strain of enterotoxigenic Escherichia coli," FEBS Lett. (1987), 215(1):165-170.	
/PR/	EC	So and McCarthy et al. "Nucleotide sequence of the bacterial transposon Tn1681 encoding a heat-stable (ST) toxin and its identification in enterotoxigenic Escherichia coli strains," <i>Proc. Natl. Acad. Sci USA</i> (1980), 77:4011-4015.	

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/PR/	ED	Stern, J. H. et al., "Control of the light-regulated current in rod photoreceptors by cyclic GMP, calcium, and l-cis-diltiazem," <i>Proc. Natl. Acad. Sci. USA</i> (1986) 83(4), 1163-1167.	
	EE	Stuart J. and J.D. Young, Solid Phase Peptide Synthelia, Pierce Chemical Company, Rockford, Il (1984)	
/PR/	EF	Sugimoto, T. et al., "Atrial natriuretic peptide induces the expression of MKP-1, a mitogenactivated protein kinase phosphatase, in glomerular mesangial cells," J. Biol. Chem. (1996), 271(1), 544-547.	
/PR/	EG	Thompson, W. J. et al., "Exisulind induction of apoptosis involves guanosine 3',5'-cyclic monophosphate phosphodiesterase inhibition, protein kinase G activation, and attenuated betacatenin," Cancer Res. (2000), 60(13), 3338-3342.	
/PR/	ЕН	Waldman, S.A. et al., "Influence of a glycine or proline substitution on the functional properties of a 14-amino-acid analog of Escherichia coli heat-stable enterotoxin," Infect. Immun. (1989) 57(8):2420-4.	
/PR/	EI	Vaandrager et al., "Guanosine 3',5'-cyclic monophosphate-dependent protein kinase II mediates heat-stable enterotoxin-provoked chloride secretion in rat intestine," Gastroenterology (1997) 112(2), 437-443.	
/PR/	EJ	Vaandrager et al., "Guanylyl cyclase C is an N-linked glycoprotein receptor that accounts for multiple heat-stable enterotoxin-binding proteins in the intestine," J. Biolog. Chem. (1993) 268(3):2174-2179.	
/PR/	EK	Vaandrager et al., "Differential role of cyclic GMP-dependent protein kinase II in ion transport in murine small intestine and colon," Gastroenterology (2000),118(1), 108-114.	
/PR/	EL	Waldman, S. A. et al., "Heterogeneity of guanylyl cyclase C expressed by human colorectal cancer cell lines in vitro," Cancer Epidemiol. Biomarkers Prev. (1998) 7(6), 505-514.	
/PR/	ЕМ	Wilmink, A. B. et al., "Overview of the epidemiology of colorectal cancer," Dis. Colon Rectum (1997)40(4), 483-493	
/PR/	EN	Winter et al., "Man-made antibodies," Nature (1990), 349(6307):293-299.	

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Application Number	10/775481		
Filing Date	February 10, 2004		
First Named Inventor	Scott Waldman		
Art Unit	1642		
Examiner Name .	Catherine Joyce		
Attorney Docket Number	TJU0018-100 (WAL_SCO.008/CGG)		

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/PR/	EO	Yoshimura, S. et al., "Essential structure for full enterotoxigenic activity of heat-stable enterotoxin produced by enterotoxigenic Escherichia coli" FEBS Lett. (1985) 181(1):138-142	
/PR/	EP	Zufall, F. et al., "Cyclic nucleotide gated channels as regulators of CNS development and plasticity," Curr. Opin. Neurobiol. (1997), 7(3), 404-412.	
/PR/	EQ	Zhang, W. et al., "Interruption of transmembrane signaling as a novel antisecretory strategy to treat enterotoxigenic diarrhea," FASEB J. (1999),13, 913-922	
/PR/	ER	Zingman, L. V. et al., "Signaling in channel/enzyme multimers: ATPase transitions in SUR module gate ATP-sensitive K+ conductance," <i>Neuron</i> (2001) 31, 233-245.	
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